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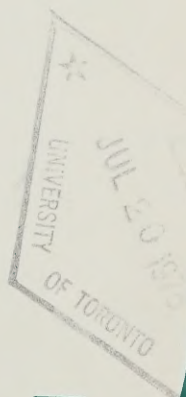
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Teachers' Handbook Seat Belt Citizen





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Ministry of
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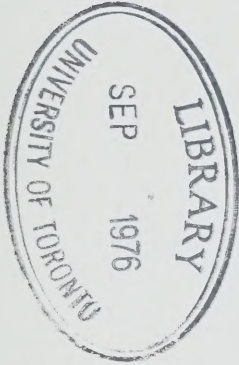
The Ontario Educational
Communications Authority



Introduction

In 1972, a prototype program to teach elementary school children about the value of seat belts was developed and experimentally evaluated by the Ontario Ministry of Transportation and Communications. Groups of 75 to 100 children, from Grades 2 and 3, attended an hour-long session on seat belts. They were given brochures to take home and were

asked to tell their parents about the program. The project demonstrated a significant increase in the use of seat belts *by the parents* of the children exposed to the program. Because of the success of this project, it was decided to design a comprehensive school seat belt program for Grade 2 and 3 children in Ontario.



Program Objectives

- To increase awareness among elementary school children of how seat belts prevent injury and death in traffic accidents.
- To teach children how to wear seat belts properly.
- To create in children a positive attitude toward wearing seat belts.
- To increase seat belt use among these children.
- To encourage the children to initiate discussion about seat belts with their parents, at home and in the car.

Program Components

- A fifteen-minute animated film will be available in mid-October. A mock-up of the film has been produced in the form of a slide show, which will substitute for the film until it is available.
- Classroom activities through which the themes of the film can be expanded and reinforced.
- Take-home materials for the children.
- Follow-up package to be administered independently by the teacher.

The program will include information on the "human collision," the value of seat belts, the proper use and adjustment of seat belts, and identification figures who always wear seat belts. The in-class portion of the program is approximately 45 minutes in length and is novel and exciting for the children. The use of large posters and a car seat will help to achieve this effect.

Development of Program Materials

The Ontario Educational Communications Authority was contracted to produce the film for the program and also to develop and design the post-viewing materials. All materials, particularly the film, were comprehensively pre-tested as they were being developed, and the entire program is being pilot tested. Background research has been conducted to determine the extent to which Grade 2 and 3 children are aware of seat belts, and to estimate the amount and type of information that this age group has already acquired about seat belts.

The results of this research indicate that children in Grades 2 and 3 are aware of seat belts. Small group discussions were conducted and in every case, with no prompting from the discussion leader, seat belts were mentioned as an important part of the car. One of the major objections the children had to

wearing seat belts, that they hurt because they are tight, would seem to be related to the finding that almost all the children believed that the lap belt should be worn across the stomach. When probed about their experience as passengers, many children complained about bumping their heads as a result of sudden stops or bumpy roads. A surprising number reported that they, or someone they knew, had fallen out of a moving car.

Program Implementation

The program is being carried into the schools by the O.P.P. Community Service Officers and the Municipal Police Safety Officers. Both these police groups are presently teaching safety education in the schools, and for this reason are likely the best qualified personnel to deliver the school program.

Evaluation

Three pilot projects are being conducted to evaluate the effectiveness of the school program. Each evaluation involves treated schools, in which Grade 2 and 3 children will receive the program and an equal number of untreated or control schools which will not receive the program during the pilot.

The effect of the program on children will be measured through in-depth, personal interviews before, during and after the program. Indirect effects on their parents will be measured by means of plaza surveys (observation of belt use) and telephone surveys (attitudinal and knowledge changes). In each pilot area, these measures for parents of treated children will be compared with those for parents of untreated children. Feedback from those who deliver the program, as well as from teachers and parents, will also be sought. In this way, it will be possible to determine behavioural, attitudinal and knowledge changes brought about by direct or indirect exposure to the School Seat Belt Program.



Guideline for Program Implementation

Note to the Teacher

The film *Citizen Seat Belt* was produced by O.E.C.A. for the Ministry of Transportation and Communications. It is intended to be the focus of the Seat Belt Safety Presentation, which the police officer is bringing to your classroom. However, its effect

depends largely on its follow-up in general class activities after the officer has gone. The suggestions given have been designed to fit in with basic learning activities, and we hope you will help to promote seat belt safety by using them with your class.

The Film "Citizen Seat Belt"

Recent research has shown that elementary school children, especially those in Grades 2 and 3, are very responsive to animation. The animated approach, used so often in the world of TV commercials and advertising, has been extremely successful in its influence over children. Animation provides a captivating environment in which to present important information without

overshadowing it. *The Electric Company* found, for example, that information presented by animated characters was much more effective than a presentation made by a live person. It was decided, therefore, to use animation as a vehicle to promote seat belt safety. The message of *Citizen Seat Belt* is direct and positive: Wear your seat belt properly, whenever you are in a car. It's the best protection you have.

Film Objectives

- To create a positive attitude toward wearing seat belts.
- To give information on the location and correct use of seat belts.
- To give information on how seat belts can prevent serious injuries in car accidents.
- To instil an awareness that seat belts are the best protection in a car, and that they should always be worn, however bothersome or uncomfortable they may be.
- To reinforce the fact that since many accidents happen close to home, seat belts should be worn at all times, even on short journeys.
- To persuade children so effectively that seat belts should be worn, that they, in turn, will persuade family and friends to do so.
- To present all the above in an entertaining and positive way.



Synopsis of the Film

Two children, John and Corry, are playing with a toy go-cart. John wishes desperately for a real car, whereupon the Fairy Carfather appears, produces a real car and promises them a ride. Corry is concerned that the car lacks something; but the Fairy Carfather is rather happy-go-lucky in nature, and car safety is not one of his top priorities. Suddenly, he has to stop abruptly for a stray cat and goes flying through the window. Corry realizes that it is the seat belts that are missing. Undeterred, the Fairy Carfather produces seat belts for John and Corry, but refuses to buckle up himself since, with his windows rolled up, he feels quite safe. Another sudden stop throws his head against the car roof. Ungraciously he agrees to put on a seat belt. However, he gets in such a muddle that the location and positioning of belts has to be explained to him.

In a dream fantasy, the Fairy Carfather finds himself in Seat Belt Safety Land. He is apprehended by the Seat Belt Safety Patrol, who proceed to give him lessons in seat belt safety. He

soon learns that (1) you never know what will happen, so always buckle up; (2) it's important to buckle up correctly; (3) accidents happen anywhere, even near home, so seat belts must be worn at all times.

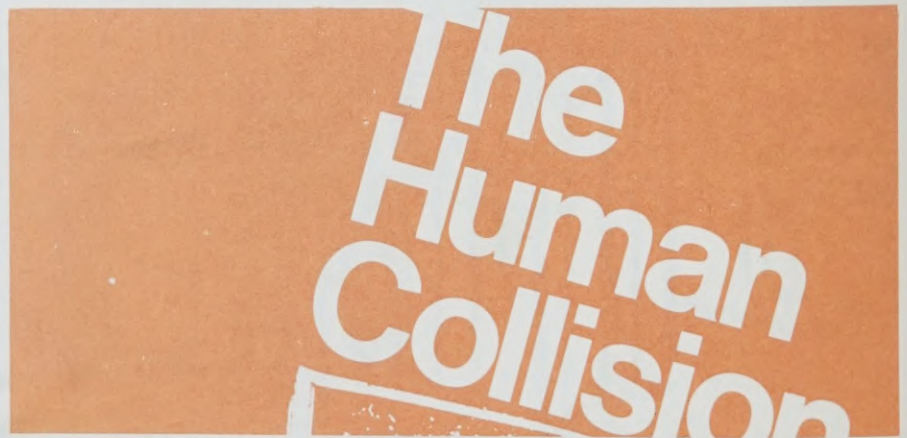
The Fairy Carfather, shaken by his experiences, is finally convinced that the most important thing to do when getting in a car is to put on the seat belts. At this point, the correct placement of belts is reinforced.

At four o'clock, the Fairy Carfather realizes that he must return the car. The children refuse to unbuckle their belts and get out until they've had a ride. Consequently, at the appointed time, the car "disappears," and everything becomes invisible, except for the occupants and their seat belts. A traffic officer, impressed by their use of seat belts, presents them with an award of merit. The film ends with John and Corry driving off with their parents, admonishing their father to wear his seat belt. The Fairy Carfather has the last word: Remember to tell everyone how important it is to wear seat belts.



Your Resource Material

The enclosed booklet, *The Human Collision* was prepared by the Ministry of Transportation and Communication for its Seat Belt Education Program. It contains all the latest information and statistics on seat belt safety and is your resource manual. It should contain the answer to any question likely to arise from your class. It may also provide a stimulus to further class activities of your own choice.



Police Presentation

The police will introduce and present the film and then take up the main points about seat belt safety. These are:

In an accident:

- Seat belts keep you inside the car.
- Seat belts prevent you from hitting anything inside the car.
- Seat belts allow you to come to a more gentle and gradual stop.

You should wear seat belts:

- All the time.
- Properly.
- Even on short journeys.

The officer will leave three posters for classroom use as well as distributing buttons and car bumper stickers. They will also give each student an activity book to take home; some of the activities suggested in it could be taken up in class.



Classroom Activities

The following are suggestions of how seat belt safety could be reinforced in your general class activities after the film presentation. Please adapt them according to the needs of your class.

Communications

- Ask the students to make up Fairy Carfather stories of their own. These could be illustrated and put into a class book; they

could also be tape-recorded for other classes to listen to. Establish the main points of seat belt safety again, so that not all the stories are on the same theme.

- “The Seat Belts’ Own Story.” Ask the students to write a story from the seat belts’ point of view. Again, this could be tape-recorded.

Drama

Students could write and act out various situations; e.g., a convincing persuasion of friends or parents who don't like wearing seat belts; another Fairy Carfather or Seat Belt Safety Land situation.

Survey

How to compile a *questionnaire* and conduct a *survey*.

- What do you really want to find out?
- How to phrase the question for a yes/no answer.
- How to record findings.
- How to make percentage results.

Students could conduct a survey of friends, neighbours and parental friends to find out how many adults wear seat belts (e.g., always/sometimes/never) and why; how many children wear seat belts; how many children usually sit in the front or back seat of the car; how many cars have front and back seat belts; kind of belts, etc. Children should be encouraged to make up a simple questionnaire and compile their own results, focusing on one or two points only. This idea is already in the student activity book, but further work on how to ask questions and record results could be developed.

Debate

In the Seat Belt Safety Land, the Seat Belt Patrol looked for people not wearing their seat belts. In Australia it is now compulsory to wear seat belts. Conduct a debate: "Ontario should pass a law to make the wearing of seat belts compulsory," or "We need a Seat Belt Safety Patrol."

Art

Assign free expression art work on the seat belt safety theme. Students might like to make their own classroom posters; they could also make a seat belt safety collage, a reminder sticker for the back of each car seat, a decorated litter bag with seat belt slogan, or puppets of film characters.



Environmental Studies

- Discuss the theme of safety harnesses; e.g. who else wears seat belts as part of their job (racing drivers, pilots, window cleaners); where else do people use safety harnesses or safety equipment suited to their job (ferris wheel, construction sites, telephone linemen).
- Encourage some personal research in this area — or a group project.
- Consider some safety rules for bike riding.

Mathematics

- In a given week collect data in order to record:
 - how often you did/did not wear a seat belt
 - how often your parents did/did not wear a seat belt
- Ask students to survey twenty cars in a local parking lot and to record how many were equipped with shoulder and/or lap belts.



Science

Test the seat belt claims and write up the exercise as an experiment. This could be done as a demonstration, or in groups in class. Interested students could repeat (perhaps with parental assistance) the experiment at home.

Seat Belt Claims

In an accident, seat belts:

- prevent car passengers from hitting the vehicle interior
- prevent car passengers from being thrown out of the car

Materials

- piece of wood, $\frac{3}{8}$ " to 1" thick, 3" to 6" wide and 6" to 12" long
- 10 nails or wood screws 2" to 3" long
- one styrofoam coffee cup
- 4 empty thread spools (wood or plastic)
- assorted elastics; 2 thumbtacks; masking tape; wax paper
- board for a "ramp" (optional), $\frac{1}{4}$ " to 1" thick, twice as wide as "car" piece and 30" to 60" long
- two or three raw eggs

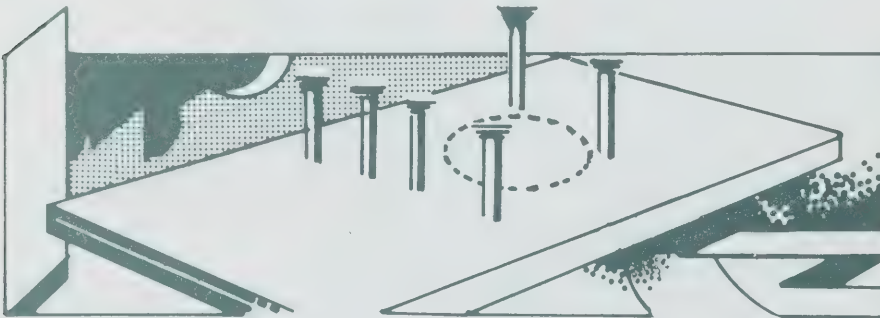
Tools

- hammer; scissors; screwdriver (if screws are used)

Method

Construct a car for the egg "passenger" using the following steps.

- Drive 4 nails into wood in a row, for the dashboard support. Leave at least $1\frac{1}{2}$ " of nail protruding.

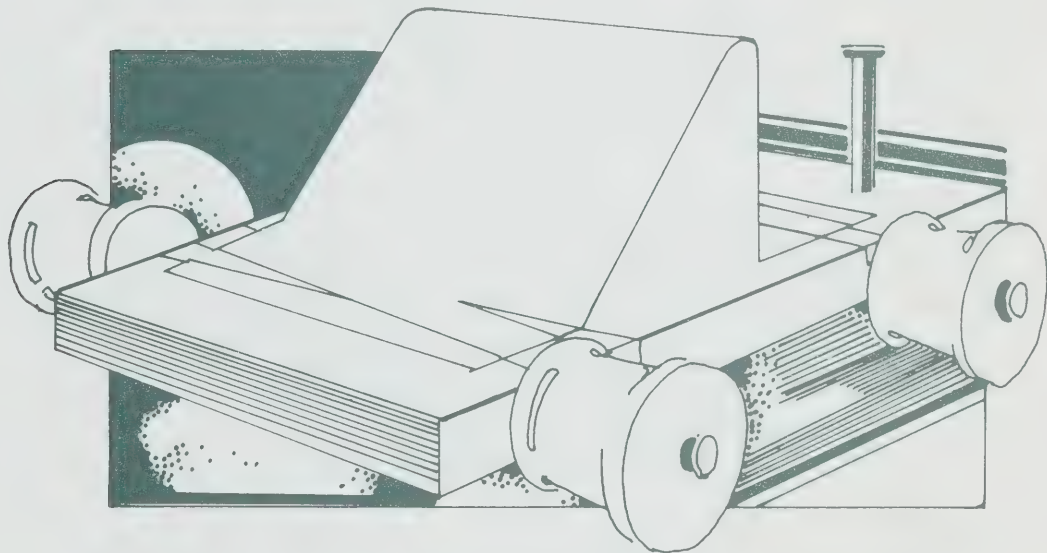


- Drive 2 nails into wood for seat back support. Take care that the spacing of the nails is proper for the size of cup you are using.

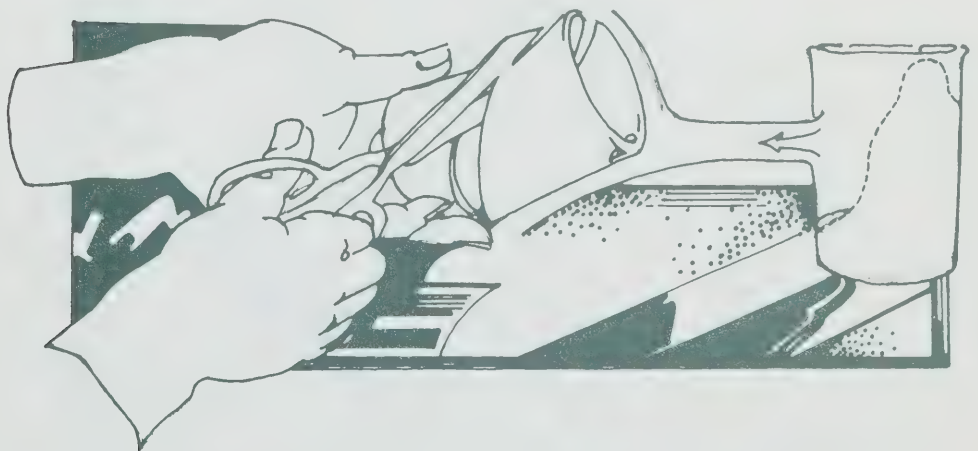
- Drive 4 nails into edges of wood at the ends, after sliding spools over them. These will make the wheels. To ensure smooth rolling, rub ends of spools with a bar of soap, and do not hammer nails too tightly against spools. There should be a $\frac{1}{8}$ " axial looseness.



- Fold a piece of paper to form the dashboard and hood, and tape it over nails as shown in illustration.



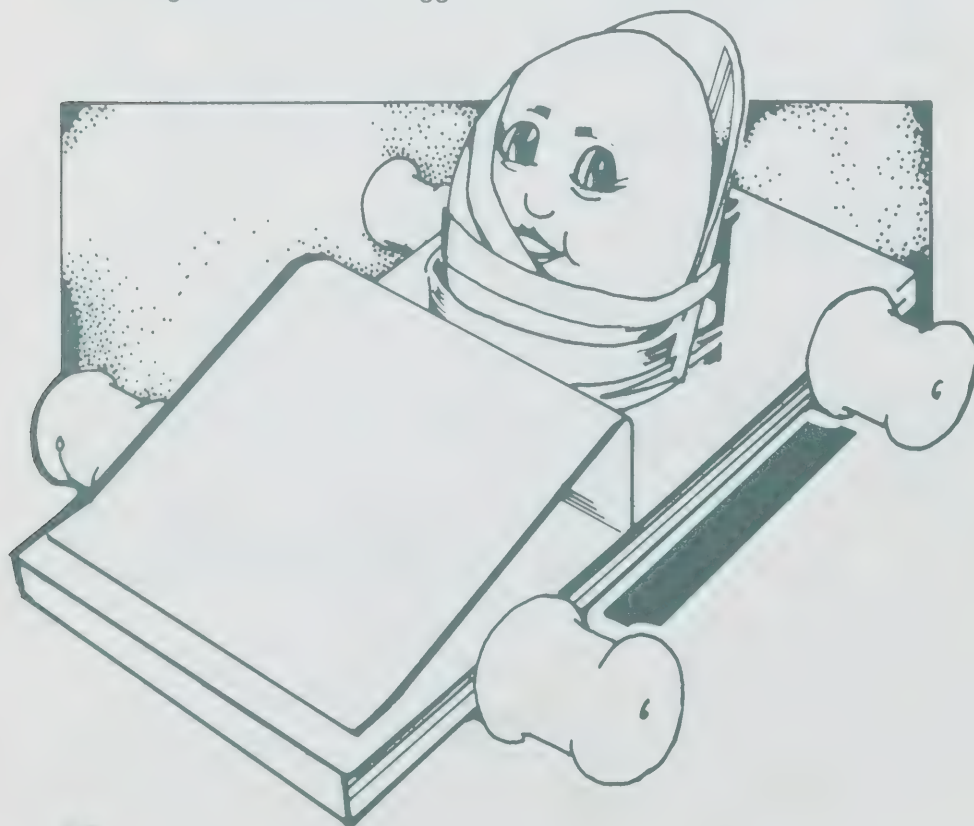
- Draw the outline of a bucket seat on the styrofoam coffee cup, and cut it out with scissors as shown in illustration.



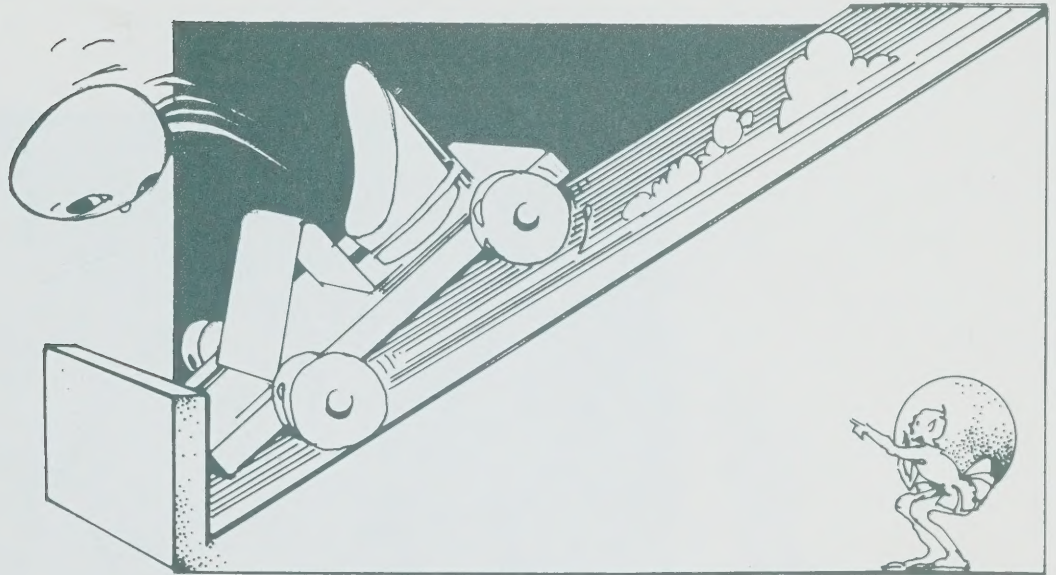
- Fasten cup into place against supporting nails using thumbtacks through the bottom of the cup into wood. Place elastics around both the cup base and support nails.



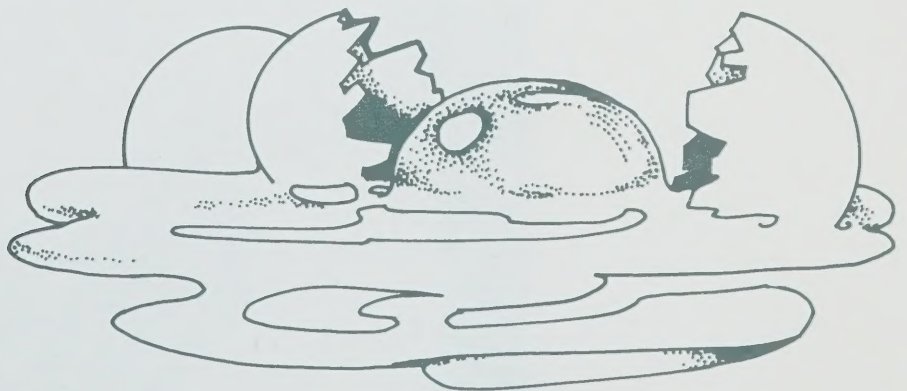
- Test to see if the car rolls straight and relatively smoothly. Adjust spool axles to improve rolling by bending them.
- Add some padding (tissue or paper towelling) to inside bottom of seat.
- Make a seat belt for the egg, using either a wide elastic or narrow strips of masking tape. If an elastic is used, it must be either small enough in diameter or tied in a knot to fit tightly around the egg when in the seat. Also, the "seat belt" must be positioned very carefully to the correct height on the egg. The elastic should not be too high, or too low. Test the belt's effectiveness by hitting the front of the car with your open palm, and observing the egg for any shift in position. Adjust and/or tighten the belt if the egg tends to move with this test.



- The experiment can now begin. It should be run in at least three steps. Each “crash” may be performed either by allowing the car to coast down a ramp into a solid wall, or by pushing it quickly across the floor towards a solid wall (taking care not to shake the unbelted egg out). The crash “site” around the wall should be protected from egg stains using a sheet of wax paper. The first crash using a belted egg will demonstrate that the car can sustain a severe blow without damaging the egg. The second crash should involve an unbelted egg. Make every



effort to have the crash intensity the same as the first one. Before this crash, ask the children to guess where they think the egg will go after the car hits the wall. Try to convey the concept that the egg continues its motion until it hits something and stops. It will likely hit the dashboard nails (after crushing the paper “padding”), or the barrier in front of the car. The third crash should be a repeat of the first to demonstrate again how effective the belts are.



- You may wish to make changes in the above format to increase interest or to enhance the realism of the experiment. For example, the car can be painted with inks or crayons to make it more attractive, or a second vehicle (e.g., a toy car) can be placed at the bottom of the ramp or against the wall for a more realistic, vehicle-to-vehicle crash. Any variations attempted should first be tried without an audience to determine if they will work, and to decide how to best present them.

Conclusions

In an accident, an unbelted passenger is likely to be thrown from his seat and be severely injured when he hits the car interior or is ejected and hits something outside the car.

Seat belts do not prevent accidents, but they do keep you in your seat, where your injuries will be minimized.



